

What is claimed is:

SUB A17

1. A method for searching a database in an information retrieval system according to user-specified geographical location information using a mobile communications device operating on a wireless network, comprising the steps of:

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- (a) creating a database for storing at least geographical location information for each of a plurality of items of interest;
- (b) receiving geographical location information corresponding to a location of a user's mobile communications device;
- (c) receiving a request to search the database for items of interest located in a vicinity of a geographical location specified by a user, wherein the specified geographical location corresponds to the received geographical location information; and
- (d) generating a search query for items of interest within a radial distance of the geographical location.

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2. The method of searching a database according to claim 1, wherein the specified geographical location corresponds to the present location of the user's mobile communications device.

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3. The method of searching a database according to claim 2, wherein the geographical location information is determined by triangulation of control signal strength received at cell towers surrounding the user's communication device.

4. The method for searching a database according to claim 2, wherein the geographical location information determined by a GPS receiver within the user's communication device.

5. The method for searching a database according to claim 1, further comprising the steps of calculating a radial distance surrounding the specified geographical location and searching for items of interest at geographical locations within the calculated radial distance.

6. The method for searching a database according to claim 1, wherein the geographical location specified by the user is a previous location of the user's mobile communications device.

7. The method for searching a database according to claim 1, wherein geographical location specified by the user is a location known to the system and is then personalized by the user for a future search as a personalized landmark for a radial search.

8. The method for searching a database according to claim 6, further comprising the steps of:

receiving a name specified by the user for the specified geographical location;

storing the specified name and corresponding geographical location information as an entry in a locations table; and

upon receiving a request to search for items of interest in the vicinity of a geographical location specified by name,

- (i) searching the locations table for the specified name, and
- (ii) providing the geographical location information corresponding to the specified name in a search query.

9. The method for searching a database according to claim 8, further comprising the step of digitally encoding an audio speech signal of the specified name, wherein the digitally encoded signal identifies a specific location and is stored in the locations table.

10. The method for searching a database according to claim 8, wherein the user pre-configures the locations table with geographical locations at which the user intends to search.

11. The method for searching a database according to claim 8, further comprising the steps of:

requesting a user identification before storing a specified name and corresponding location information in the locations table; and

requesting a user identification before searching the locations table,

wherein the specified names and corresponding locations are stored according

5 to the user identification.

12. An information retrieval system for identifying items of interest located within a vicinity of a user-specified geographical location, comprising:

- (a) a database records unit for storing a plurality of information about a plurality of items of interest, including a name of each item of interest search, criteria associated with each item of interest, and a corresponding geographical location for each item of interest, and a corresponding geographical location for each item of interest;
- (b) a geographic locations processor for receiving a user-specified geographical location for searching the database records unit; and
- (c) a database index for generating a search query including the user-specified geographical location.

13. The information retrieval system according to claim 12, further comprising a question generator table for prompting a user to provide a user-specified geographical location for searching the database records unit.

14. The information retrieval system according to claim 13, wherein the question generator table provides digitized audio speech signals as prompts to a user's mobile communications device.

5 15. The information retrieval system according to claim 14, wherein the information retrieval system digitally encodes responses to the prompts to create the search query in the database index.

10 16. The information retrieval system according to claim 12, wherein the geographic locations processor processes user-specified location information provided by a user's mobile communications device and provides location information to a database index for generating a search query.

15 17. The information retrieval system according to claim 16, further comprising:

a geographic locations name encoder for receiving and encoding user-specified geographic location names corresponding to geographical location information provided by a user's mobile communications device; and

20 a geographic location database for storing encoded user-specified geographical location names and corresponding geographical location information provided by users for future database searches.

18. A method for performing a search on an information retrieval system to identify items of interest in a vicinity of a user-specified geographical location, comprising the steps of:

(a) providing informative prompts to prompt a user to provide search criteria;

(b) detecting a request by the user to search for items of interest in a vicinity of the user's present location;

(c) requesting geographical location information from a user's communication network carrier, representing a present geographical location of the user's communication device;

(d) receiving geographical location information provided by the user's network carrier; and

(e) generating a search query for items of interest within a radial distance of the present location of the user's communication device.

19. The method for performing a search according to claim 18, wherein the geographical location information provided by the user's network carrier is the cellular site in which the user's communication device is registered, and the information retrieval system searches for items of interest in the identified cellular site and neighboring cellular sites.

20. The method of searching according to claim 18, wherein the geographical location information provided by the user's network comprises geocoded geographical coordinates of the user's communication device.

5 21. The method of searching according to claim 18, wherein the user's communication device is a landline telephone, and the location information provided by the user's network is an address.

22. The method of searching according to claim 18, wherein the radial distance is determined such that a minimum number of search results will be identified by the search.

SUB A27 23. The method of searching according to claim 22, wherein the radial distance is determined by business density information stored according to zip code.

15 24. A method for performing a search on an information retrieval system to identify items of interest in a vicinity of a user-specified geographical location, comprising the steps of:

20 (a) configuring a table of names of geographical locations specified by a user and geographical locations corresponding to the names;

(b) detecting a request by the user to search for items of interest in a vicinity of a location stored in the table;

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- (c) receiving a name of a geographical location;
  - (d) searching the table for the named geographical location and the corresponding location information; and
  - (e) generating a search query for items of interest in the vicinity of the named geographical location.

25. A method for searching an information retrieval system for items of interest in a vicinity of a user-specified location, comprising the steps of:

10 (a) detecting a request by a user to search for items of interest in a vicinity of a user-specified location;

(b) determining whether the user requests to search according to the user's present location or a location stored in a table of locations pre-configured by the user; and

15 (i) if the user request is to search according to the present location, requesting location information from a network carrier for the user's mobile communications device, and

(ii) if the user request is to search according to geographical location information provided in the pre-configured table of locations, requesting location information from the pre-configured table of locations; and

20 (c) generating a search query using the provided geographical location information.

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